

*Extending switching benefits to the user's desktop*



## IBM 8276 Nways Ethernet RoutePort

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### Highlights

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- **Flexible-port switching concentrator**
- **Low-cost extension of switching benefits to the user's desktop**
- **Internal software segmentation**
- **Reduced device count**
- **Easy administration with powerful, graphical management tools**
- **Simple configuration**
- **Compatible with other IBM Ethernet LAN switches**

### Features

The IBM 8276 Nways™ Ethernet RoutePort provides a 36-port Ethernet port switching concentrator that complements IBM's powerful 8273 and 8274 Nways RouteSwitches and 8271 Nways LAN Switches. Used in combination with one of these switches, the 8276 extends the benefits of switching to the user's desktop. It's a good solution for customers who want the advantages of switching, LAN segmentation, virtual LANs (VLANs), routing and increased bandwidth but who can't justify the cost of providing 10 Mbps to every desktop.

The 8276 allows all of its ports to be divided via software into as many as four independent Ethernet segments, providing an effective bandwidth of 40 Mbps. And depending on your model selection, up to two of the 36 ports on each 8276 can be configured as optical fiber links.

### Powerful VLAN extension

Users connected to an 8273 or 8274 through the 8276 inherit the benefits of their powerful VLAN implementation. The 8276 can support up to 32 policy-based VLANs on a single segment. A single VLAN can span multiple segments.

### Reducing current and future costs

LAN equipment and administration costs are major expenses when expanding networks. Per-port costs are of particular concern for both current and future needs. Use of the 8276 with one of IBM's powerful LAN switches maximizes user function at minimum port cost and allows for future expansion at minimum additional cost.

### Simplified changes

The ability to dynamically add, delete or move users and make other network changes through software means that administrators can reconfigure the network without cable changes or network downtime. Being able to easily move users from one segment to another provides simple bandwidth management for improved network performance and user response.



### Integrated network management

The 8276 is equipped with a built-in SNMP agent that allows the hub to be managed through the IBM RouteSwitch Network Manager and RouteTracker Manager. And the 8276 supports network management and control via a console management terminal connected to the serial communications port.

### IBM Nways RouteSwitch Network Manager

IBM's Nways RouteSwitch Network Manager provides what you need in a network management package. Replace guesswork or calculations with real-time, graphical representations of network performance, alarms and configurations. Network configuration,

monitoring and diagnostic information is simple, regardless of the mix of different vendor equipment that makes up your network. You can integrate the RouteSwitch Network Manager with a variety of network platforms including HP OpenView for Windows®, HP OpenView for UNIX®, SunSoft SunNet Manager and, of course, IBM's NetView® for AIX®.

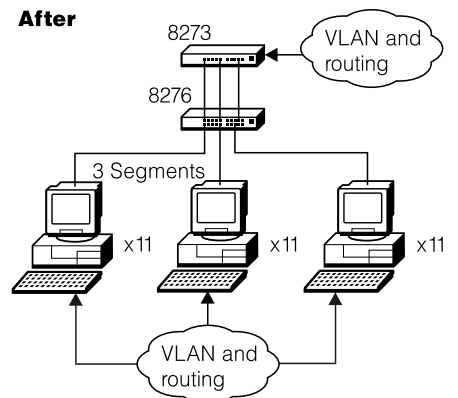
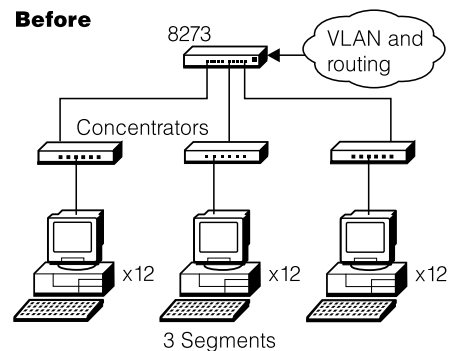
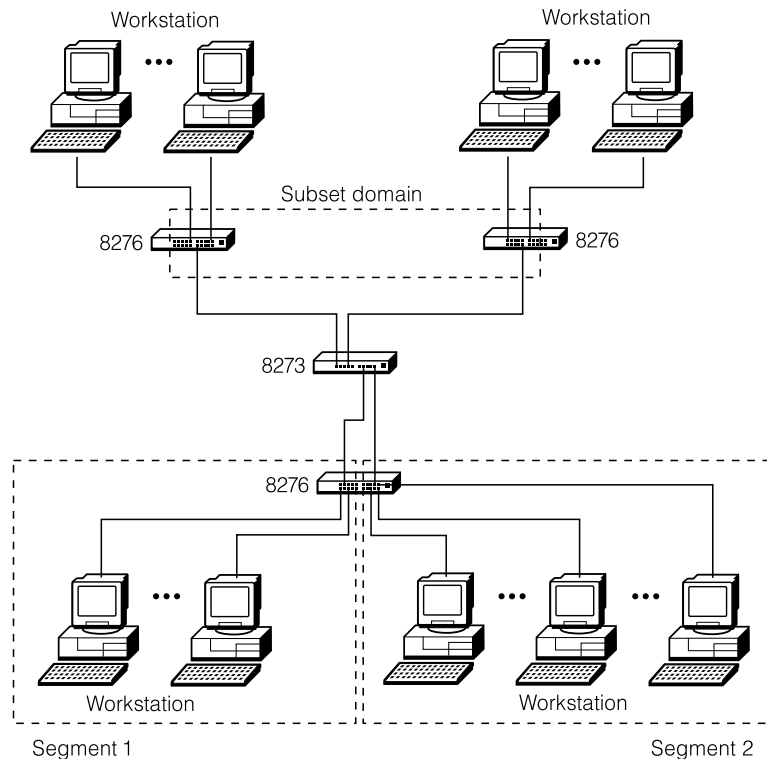
### IBM Nways RouteTracker Manager

A powerful graphical application, the RouteTracker provides the flexibility of policy-based VLANs with the security and isolation of port VLANs using RouteTracker grouping capability. You can view the relationship between groups, VLANs and devices across the entire network. Drag-and-drop features with smart wizards make VLAN setup and maintenance easy.

### Technical details

The 8276 provides thirty-six 10BASE-T Ethernet ports. Two of these ports, depending on the 8276 model, may be configured as 10BASE-FL using single-mode or multimode cabling. The 10BASE-T ports connect through RJ-45 connectors using a maximum of 100 m (328 ft) of 100-ohm STP or UTP cable. The optional, 10BASE-FL ports connect through SC (single-mode) or ST (multi-mode) connectors using a maximum of 2000 m (6562 ft) of fiber cable.

There is one EIA 232-C serial port that connects through a 9-pin, D-shell connector to an optional customer-provided management console.



<b>Features</b>	<b>Benefits</b>
<b>Internal software</b>	Highly flexible subnetting and domain segments assignments.
<b>Cost reduction</b>	Replaces multiple hardware concentrators, thereby reducing the number of devices requiring management.
<b>8273 connection</b>	Extends switching benefits to the desktop.
<b>Large number of ports</b>	The extended benefits of switching are achieved at a low cost per port.
<b>Integrated network</b>	Powerful control and configuration management capabilities without network disruption.

#### **Model number matrix for the 8276**

<b>Model number</b>	<b>No. of 10BASE-T RJ-45 ports</b>	<b>No. of 10BASE-FL SC (multimode) ports</b>	<b>No. of 10BASE-FL ST (single-mode) ports</b>
360	36	0	0
361	35	1	0
362	34	2	0
363	35	0	1
364	34	0	2
365	34	1	1

#### **A set of 15 LEDs provide an indication of port link integrity**

Software allows the 8276 to be configured internally as one to four independent Ethernet segments. Any or all of the 36 Ethernet ports can be assigned to any of the four segments. These assignments can be altered via software at any time, without affecting uninvolved ports.

#### **For more information**

To find out more about the IBM 8276 Ethernet RoutePort and other high-performance IBM communications and networking products, contact your IBM representative or call IBM Direct at 1 800 IBM-CALL (1 800 426-2255). You can also access the IBM Networking Home Page at <http://www.networking.ibm.com>.

Copies of this and other related product specification sheets can be obtained from the IBM FAX Information Service by dialing 1 800 IBM-4-FAX (1 800 426-4329) in the U.S. or Canada or by dialing 415 855-4329 outside the U.S. and Canada and requesting the document number 7213.



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## **IBM 8276 Nways Ethernet RoutePort at a glance**

<b>Models</b>	360, 361, 362, 363, 364, 365
<b>LAN ports</b>	36
<b>Other ports</b>	One serial port, EIA 232-C, 9-pin D connector, configured as an IBM AT® serial port (DTE)
<b>Memory</b>	2 MB of flash 1 MB of DRAM
<b>Data rate</b>	10 Mbps
<b>Maximum frame size</b>	1518 bytes
<b>Internal segments</b>	4 maximum
<b>Physical specification</b>	Width: 432 mm (17 in.) Depth: 330 mm (13 in.) Height: 51 mm (2 in.) Weight: 4.1 kg (9 lb)
<b>Standards compliance</b>	IEEE 803.2; IAB RFC 826; IAB RFC 894
<b>Warranty</b>	1 year
<b>Related publications</b>	<ul style="list-style-type: none"><li>• <i>IBM Nways RouteSwitch User's Guide</i>, GA27-4166</li><li>• <i>IBM Nways RouteSwitch User's Release Note</i>, GC30-3874</li><li>• <i>IBM 8273 Nways Ethernet RouteSwitch specification sheet</i>, G224-4524</li></ul>

